

Did you know?



Air pollution kills over ten times more people than road accidents in the EU.



Around 90% of Europeans living in cities are exposed to levels of air pollution deemed damaging to human health.

For sources and other facts on air quality visit : www.hackair.eu/facts

Reasons to improve our air...

- Air pollution is the single environmental issue Europeans worry about the most.
- Nearly six out of ten Europeans do not feel sufficiently informed about air quality issues in their country.
- Poor air quality has serious health and lifespan implications and causes harm to the natural environment.

...with better data

Knowing more about air quality is the first step to improving it.

hackAIR helps to:

- fill current gaps in areas where the distance between sensors may be significant;
- improve access to data from different sources;
- and provide up to date air quality information.

Join the movement to improve air quality data in Europe!

Contact

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Project timeline

- J16** January 2016: Start of hackAIR project
- A17** August 2017: First version of hackAIR platform available
- S17** September 2017: Pilot tests start in Germany and Norway
- O18** October 2018: Final version of hackAIR platform available
- D18** December 2018: End of hackAIR project

Partners



Affiliated organisations



This project has received funding from the European Union Horizon 2020 research and innovation programme under grant agreement No 688363.

Open technology to map the air we breathe



COLLECTIVE AWARENESS FOR AIR QUALITY

The project hackAIR joins the movement to improve air quality data in Europe through participatory sensing technology and citizen engagement. We build an open technology platform that you can use to access, collect and improve air quality information in Europe.

www.hackAIR.eu



Open technology

hackAIR is an open technology platform that you can use to access, collect and improve information on air quality in Europe.

It consists of:

a customisable web application for local air quality information; and a mobile app that citizens can use to access to air quality information or contribute measurement.

APIs will be available for fetching information from the database.

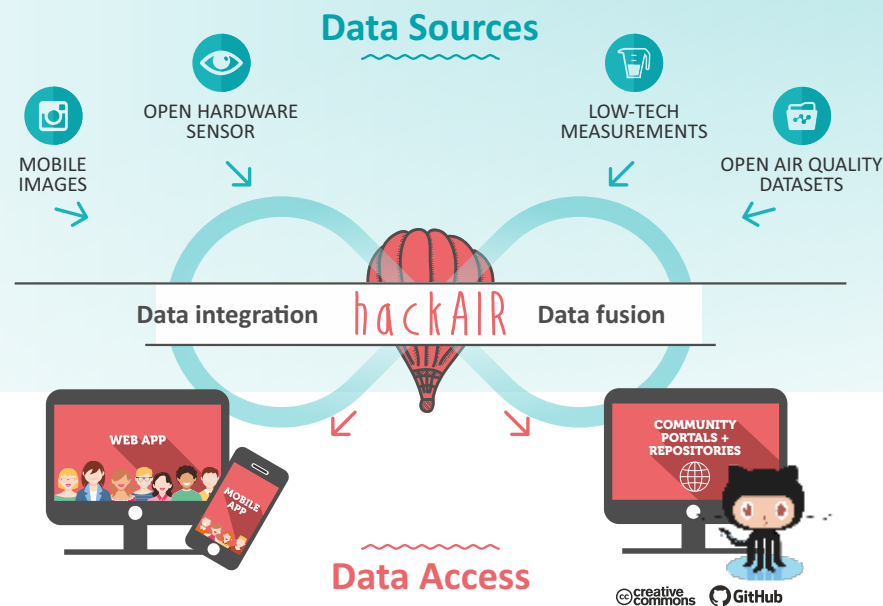
hackAIR combines official air quality data with a number of community-driven data sources, including:

an easy-to-build open hardware sensor module that transmits regular air quality measurements via Bluetooth;

air quality information derived from mobile phone pictures of the sky and webcams;

and

a low-tech measurement setup involving paper filters and aquarium air pumps.



Participatory sensing and engagement

Pilot projects

With hackAIR, we want to: involve citizens directly in measuring and publishing outdoor air pollution levels; contribute to the awareness and citizen engagement on air quality issues; and encourage behavioural change towards a cleaner air.

hackAIR will build on research on public engagement and behavioural change to: tap into motivations for engaging in the participatory sensing on air quality and the elements that cause behavioural change.

hackAIR's participatory approach starts by designing the requirements for the hackAIR platform in collaboration with users and in line with technical possibilities.

In Germany, environmental activists organised by the Friends of the Earth network are campaigning for better air quality policy. In 2017, they plan to use hackAIR to: raise local awareness of air quality issues; and engage schools.

In Norway, citizens and researchers have set up an air quality monitoring network. In 2017, they plan to use hackAIR to: provide air quality information for health-conscious citizens; and encourage behavioural change.

What's in it for you?

Improving air quality in Europe requires action on many levels: from citizens and NGOs to policy makers.

hackAIR will enable communities of citizens to: map their neighbourhood's air by taking pictures of the sky; provide measurements themselves, through easy-to-build open hardware sensors; and see how air quality changes over time – and compare with other cities.

“The biggest strength of hackAIR is in making air pollution visible. You can be informed and contribute to this with hackAIR!”

Arne Fellermann, BUND

The technology developed will be of interest to policy makers, educators and technology enthusiasts: everybody can use it to manage their own air quality monitoring station - and help others learn about DIY sensing.

Individuals can use the information to:

avoid polluting behaviour (e.g. through their choice of transport);

reduce their exposure to air pollution (e.g. by deciding or adjusting the time and route of travel);

or

participate in the public discourse on improved air quality (e.g. by writing letters to policymakers).

Scientists and policy makers can use the resulting air quality data to:

gain insights on air quality patterns;

and

inform public policy.

For 2017, we are looking for organisations interested in hosting local hackAIR workshops to build awareness of air quality and explore the technology in practice. Contact us!

www.hackAIR.eu